

INTERNATIONAL SEARCH REPORT

ational Application No

PCT/IB 03/05961

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G10H1/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G10H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 877 445 A (HUFFORD CHRISTOPHER P ET AL) 2 March 1999 (1999-03-02) column 3, line 27 -column 5, line 35 column 5, line 54 - line 62; figures 1,2,4	1-7, 10-17
A	EP 0 791 914 A (YAMAHA CORP) 27 August 1997 (1997-08-27) column 10, line 16 - line 56 column 11, line 15 - line 47; figure 6	1-17
A	US 5 747 716 A (MATSUMOTO SHUICHI) 5 May 1998 (1998-05-05) column 4, line 47 - line 67 column 5, line 58 -column 7, line 23 column 7, line 58 -column 8, line 13; figure 3	1-6, 10-13, 15-17
	----- -/-	

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

G document member of the same patent family

Date of the actual completion of the international search

23 April 2004

Date of mailing of the international search report

07/05/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Pulluard, R

INTERNATIONAL SEARCH REPORT

ational Application No

PCT/IB 03/05961

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 295 123 A (NODA MINEYUKI ET AL) 15 March 1994 (1994-03-15) column 2, line 11 -column 3, line 38 column 13, line 43 -column 14, line 61; figures 11-16 ---	1-6, 10-13, 15-17
A	US 6 320 111 B1 (KIZAKI TAKAHIRO) 20 November 2001 (2001-11-20) column 5, line 53 -column 6, line 22 column 9, line 1 - line 22 column 13, line 48 -column 14, line 35 -----	1-3,6, 10-13, 15-17

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IB 03/05961

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5877445	A	02-03-1999	US 5693902 A	02-12-1997
			AU 7078196 A	09-04-1997
			CA 2236590 A1	27-03-1997
			EP 0852049 A1	08-07-1998
			WO 9711450 A1	27-03-1997
EP 0791914	A	27-08-1997	JP 2956569 B2	04-10-1999
			JP 9230880 A	05-09-1997
			CN 1161525 A ,B	08-10-1997
			DE 69707029 D1	08-11-2001
			DE 69707029 T2	27-06-2002
			EP 0791914 A1	27-08-1997
			US 5919047 A	06-07-1999
US 5747716	A	05-05-1998	JP 2927229 B2	28-07-1999
			JP 9198068 A	31-07-1997
US 5295123	A	15-03-1994	JP 3364862 B2	08-01-2003
			JP 5040475 A	19-02-1993
US 6320111	B1	20-11-2001	JP 2001013962 A	19-01-2001